Applicants:

Sun-Uk Kim et al.

Serial No. :

10/560,023

Filed

December 8, 2005

Page

2 of 8

## **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions and listings of claims in the application:

Attorney Docket No.: 76303-003US1

Client Ref. No.: OPP053249US

## Listing of claims:

1. (Previously presented) A method for fabricating a porous silica sphere comprising:

heat-treating a silica gel by increasing its temperature at a speed of 5 to 90°C per minute to 1050 to 1200°C; and

maintaining the temperature for a predetermined time, wherein the heat-treatment is performed in a rotary tube furnace.

- 2. (Original) The method of claim 1, wherein the silica gel has pores with a size of about 20-70 angstroms, and a pore volume of around 0.3 to 1.1 mL/g.
  - 3. (Cancelled)
- 4. (Original) The method of claim 1, wherein the heat-treatment is performed at an average temperature elevating speed ranging from 10°C to 70°C per minute.
  - 5. (Cancelled)
- 6. (Currently amended) A method for fabricating a porous silica sphere comprising:

a heat treatment process, wherein silica gel is subjected to a first heat-treatment at 400 to 900°C, and is subjected to a second heat-treatment at 1050 to 1200°C in which the heat-treatment process is performed using at least two rotary tube furnaces and, in the first heat-treatment, the temperature in a first rotary tube furnace is increased at an average speed of 35 to 70°C per minute up to 700°C.

Applicants:

Sun-Uk Kim et al.

Serial No.

10/560,023

Filed Page December 8, 2005

3 of 8

7. (Original) The method of claim 6, wherein the first heat treatment is performed for 20 to 60 minutes, and the second heat treatment is performed for 20 to 60 minutes.

Attorney Docket No.: 76303-003US1

Client Ref. No.: OPP053249US

8. (Cancelled)

9. (Currently amended) The method of claim 6, wherein the silica gel is subjected to the first heat treatment at 700°C and to [[a]] the second heat treatment, in a second rotary tube furnace, at a temperature of 1100 to 1150°C.